

Claims

[c1] An apparatus comprising:

a current-carrying element with a first region carrying a first current;
a second region adjacent to said first region;
said second region carrying a second current;
said second current differing from said first current
where adjacent; and
a magnetic resonance imaging machine.

[c2] Said apparatus of claim [c1] wherein:

said second region separated from said first region
by a planar interface; and
said first and second regions being mirror images in
said planar interface.

[c3] Said apparatus of claim [c1] wherein:

said first current has a first direction;
said second current has a second direction; and
said second direction is opposite said first direction.

[c4] Said apparatus of claim [c2] wherein opposite of said
second current being a mirror image of said first current
in said planar interface.

- [c5] Said apparatus of claim [c4] wherein:
 - said first region carries a first volume current density;
 - said first region has a first thickness;
 - said first region carries a first current density, comprising said first volume current density integrated over said first thickness of said first region; and
 - said first current density is constant over said first region.
- [c6] Said apparatus of claim [c1] comprising a support surface.
- [c7] Said apparatus of claim [c6] wherein said first and second regions pass under and conform to said support surface.
- [c8] Said apparatus of claim [c7] wherein said support surface is flat.
- [c9] Said apparatus of claim [c8] wherein said current-carrying element has cross-section comprising an arc of a circle.